

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) An apparatus comprising:
a portal server for operating a web portal to provide access to a web application;
a computer readable storage medium comprising computer program code recorded thereon to implement a portlet application for operating on said portal server, for managing a collection of associated portlets;
said portlet application ~~comprising~~ configured to:
~~means to~~ initiate portlets on requests of a user to access said web application;
~~means to~~ manage a portlet application session object for said portlets, wherein the portlet application session object comprises a data store object shared by a plurality of the portlets in the portlet application; and
said portlet application comprising:
a portlet application session object data store controlled by said portlet application session object for saving parameters from user requests for associating said portlets with said portlet application session object.
2. (previously presented) The apparatus of claim 1, wherein said portlet application further comprises a portlet application communication client for communicating between said portlet application session object and said web application to convey user requests received from said associated portlets to said web application.
3. (previously presented) The apparatus of claim 1 wherein said portlet application is further configured to assign a common key to each portlet associated with said portlet application session object.

4. (previously presented) The apparatus of claim 1, further comprising a user session information table configured to connect to multiple web applications with said portlet application session object.

5-18. (canceled)

19. (currently amended) ~~An apparatus~~ A method for use with multiple associated portlets in a web portal, ~~the apparatus~~ method comprising:

~~a computer-readable storage medium;~~

~~computer program code recorded on said computer-readable storage medium to implement;~~

~~means for~~ managing said multiple associated portlets using a portlet application session object, wherein the portlet application session object comprises a data store object shared by a plurality of the portlets in the portlet application;

~~implementing a portlet application data store~~ according to computer program code recorded on a computer readable storage medium; and

~~means for~~ granting read/write access to said portlet application data store by said multiple associated portlets to enable said multiple associated portlets to exchange data among each other.

20. (currently amended) ~~The apparatus~~ method of claim 19, wherein ~~the means for~~ managing said multiple associated portlets ~~comprises~~ is implemented by a portlet application.

21. (currently amended) ~~The apparatus~~ method of claim 19, further comprising ~~means for~~ managing the portlet application session object, wherein the portlet application session object is configured to manage the portlet application data store.

22. (currently amended) The ~~apparatus-method~~ of claim 21, wherein ~~the means for granting read/write access to the portlet application data store comprises~~ is implemented by the portlet application session object.
23. (currently amended) The ~~apparatus-method~~ of claim 21, wherein ~~the apparatus comprises further comprising operating a portlet server capable of operating on a portal server for hosting the multiple associated portlets in the web portal accessible to a user.~~
24. (currently amended) The ~~apparatus-method~~ of claim 21, further comprising ~~means for creating the portlet application session object for the user.~~
25. (currently amended) The ~~apparatus-method~~ of claim 24, further comprising:
~~means for creating and managing a key for the user for the portlet application session object; and~~
~~means for granting the key to each associated portlet for controlling access to the portlet application session object.~~
26. (currently amended) The ~~apparatus-method~~ of claim 25, wherein ~~the apparatus comprises further comprising operating a portlet application capable of operating on a portal server for hosting the multiple associated portlets in a web portal accessible by the user.~~
27. (currently amended) The ~~apparatus-method~~ of claim 26, wherein one portlet application is assigned to each user, and one key is assigned respectively for each user to respective portlet application session objects for each portlet application.
28. (previously presented) An apparatus for displaying to a user a web portal for a web application, the apparatus comprising:
a portal server for operating the web portal to provide access to the web application by the user;
a computer readable storage medium comprising computer program code recorded thereon to implement a portlet application, for managing a collection of associated portlets, for operating on the portal server;

a portlet application session object for the user for the associated portlets, wherein the portlet application session object comprises a data store object shared by a plurality of the portlets in the portlet application;

a portlet application session object data store controlled by the portlet application session object; and

a portlet application communication client linked to the portlet application session object data store for communicating between the associated portlets and the web application to convey user requests received from the associated portlets to the web application, wherein the portlet application communication client comprises:

a request buffer for storing requests from the associated portlets to enable the portlet application communication client to generate requests relative to the web application.

29. (previously presented) The apparatus of claim 28, wherein the portlet application communication client is further configured to generate the requests synchronized to the web application, to send information including the requests over a network to the web application, and to receive information including responses to the requests from the web application.

30. (previously presented) The apparatus of claim 28, wherein the portlet application communication client is further configured to generate the requests serialized to the web application, to send information including the requests over a network to the web application, and to receive information including responses to the requests from the web application.

31. (previously presented) The apparatus of claim 28, wherein the portlet application communication client is further configured to generate the requests serialized to the web application, to send information including the requests over a network to the web application server, and to receive information including responses to the requests from the web application server.

32-33. (canceled)

34. (previously presented) The apparatus of claim 1, wherein the portlet application session object provides an infrastructure for a plurality of the portlets in the portlet application to have independent user sessions, to share the same portlet application session, and to communicate with the web application via a single web application session.

35. (previously presented) The apparatus of claim 19, wherein the portlet application session object provides an infrastructure for a plurality of the portlets in the portlet application to have independent user sessions, to share the same portlet application session, and to communicate with the web application via a single web application session.

36. (previously presented) The apparatus of claim 28, wherein the portlet application session object provides an infrastructure for a plurality of the portlets in the portlet application to have independent user sessions, to share the same portlet application session, and to communicate with the web application via a single web application session.